

Section 1 **MANAGEMENT OF CHANGE (MOC)**

MOC No: 25789	Originator: Palumbo, Terry A.	Date Issued: 11/17/2012	Passport No:	EWO No:	ABU: D&R	Plant: 4 Crude	Year: 2012
Section 2 Reviewer: Preciado, Silvano E.	MOC Category: S/D	PSM:	MOC Type: Permanent	Expiration Date:	Other Temporary Reason		
<b>Project/Equipment Title:</b> 4 Crude Recovery - Process Piping Systems & Equipment Material Changes							
<b>Description of Change:</b> To replace process piping & equipment damaged by the 4 Crude Unit fire in 2012. Includes the TAW's that apply to the various process piping systems or equipment which had material changes (see below). This MOC also covers the upgrade of piping systems from carbon steel to 9 Chrome. These piping systems include 3 side cut, 4 side cut, reboiler bypass piping, C-1100 bottoms piping, and C-1100 inlet transfer line. Piping Systems TAW# - 17271, 17309, 17312, 17465, 17531, 17532, 17548, 17549, 17568, 17598, 17599, 17600, 17604, 17619, 17621, 17622, 17623, 17826, 17832, 17844, 17848, 17849, 17851, 18237, 18319, 18405, 18437, 18438, 18651, 18921, 18924, 18925, 18971, 18972, 19016, 19020, 19128, 19130, 19160, and 19349. Mechanical (equipment) TAW# - 17480							

MOC will be required if the change will:

- ☐ Cause the use of different feed, chemicals or catalysts?  
☐ Cause the use of different process conditions, process control, instrumentation, and protective devices or affect upstream/downstream plants?  
☒ Cause the use of new or modified equipment [which is other than inkind]?  
☐ Alter equipment siting, building, trailer locations, roads or fire protection?  
☐ Require modifying existing and/or developing new procedures?

☐ Simultaneously Begin Construction and Start-up

## Section 2

Stage 1	Pre-Implementation	Dept./Person Responsible	Date Complete	Completed By	References
	Design Review	Taylor, Patrick J.	11/21/2012	Taylor, Patrick J.	
	Process Engineering Review				
	Instrumentation Review	Ketner, Joseph A.	11/18/2012	Ketner, Joseph A.	
	Control System Review				
	Utilities Review				
	Environmental/Regulatory Review	Chamberlin, Robert T.	11/21/2012	Perez, Carlos	
	Safety/Regulatory Review	Kirby, Anthony A.	11/21/2012	Kirby, Anthony	
	Building Permits Review	Tuma, Dennis A.	11/19/2012	Tuma, Dennis A.	
	Mechanical Review				
	Inspection Review	Beauregard, John T.	11/21/2012	Beauregard, John T.	
	Metallurgy Review	Prasad, Praneil-Maharaj	11/21/2012	Prasad, Praneil-Maharaj	
	Contruction Review	Costa, Steve W.	11/21/2012	Costa, Steve W.	
	Leak Seal Review				
	Relief System Review	Muha, Edward	11/21/2012	Muha, Edward	
	Infrastructure Review				
	PHA/HSE Review	Simmons, Corey	11/21/2012	Simmons, Corey	

Authorization to Implement Change (Begin Construction): Approver: Preciado, Silvano E. Date: 11/21/2012

Stage 2	Pre-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Procedures Review	Nelson, William	3/13/2013	Nelson, William	
	Communication/Training 1	Bessire, John P.	3/21/2013	Bessire, John P.	
	Pre Start-up Safety Review	Preciado, Silvano E.	3/29/2013	Preciado, Silvano E.	

Authorization to Start-Up Change: Approver: Preciado, Silvano E. Date: 3/29/2013

Extension of Temporary Change Approved By:	Approver:	Expiration Date:	Extention Reason
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Stage 3	Post-Startup	Dept./Person Responsible	Date Complete	Completed By	References
	Communication/Training				
	Process Safety Information	Lewis, John M.			

Change in Place - Reviews, Documentation &amp; Testing Complete Approver: Date:

MOC Cancelled: Approver: Date: Cancellation Reason:

Note 1: Emergency request for change should be routed by the Approver on the next working day Retain Original in Division for five Years